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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,635	01/23/2002	Jochen Pflug	522-1760	2628

7590 02/13/2003

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EXAMINER

BOSS, WENDY L

ART UNIT	PAPER NUMBER
1775	8

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/937,635	PFLUG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Wendy Boss	1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 23 January 2002.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 25-48 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 25-48 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

*Specification*

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

*Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 25-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. In lines 1-3 of claim 25, it is not clear how the corrugated core strips can each consist of a corrugated or trapezoidal core.

5. Claim 25 recites the limitation "the plane" in 5 of the claim. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 25 recites the limitation "the flutes" in line 5 of the claim. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 25 recites the limitation "the connections" in lines 10 of the claim. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 27 recites the limitation "the corrugated core material" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

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9. Claim 27 recites the limitation "the cover layer material" in lines 2-3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 28 recites the limitation "the entire area" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 29 recites the limitation "the one cover layer" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 30 recites the limitation "the large number of corrugated core strips" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

13. In lines 4-5 of claim 31, it is not clear how the corrugated core strips can each consist of a corrugated or trapezoidal core.

14. Claim 31 recites the limitation "the connecting lines" in lines 13-14 of the claim. There is insufficient antecedent basis for this limitation in the claim.

15. Claim 33 recites the limitation "the corrugated core material" in line 2 of the claim.

There is insufficient antecedent basis for this limitation in the claim.

16. Claim 33 recites the limitation "the cover layer material" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

17. Claim 36 recites the limitation "the corrugated core web" in lines 2-3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

18. In lines 3-4 of claim 38, it is not clear how the corrugated core strips can each consist of a corrugated or trapezoidal core.

19. Claims 39-46 all refer to back to "The apparatus"; however, the base claim from which they all depend is drawn to a system rather than an apparatus.

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20. Claim 40 recites the limitation "the longitudinal slitting" in lines 2-3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

21. Claim 42 recites the limitation "the corrugated core material" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

22. Claim 42 recites the limitation "the cover layer material" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

23. Claim 45 recites the limitation "the region of the rotation of the corrugated core strips" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

24. Claim 46 recites the limitation "the apparatus for cutting" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

25. Claim 46 recites the limitation "the knives and guide elements" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

26. In lines 1-3 of claim 47, it is not clear how the corrugated core strips can each consist of a corrugated or trapezoidal core.

27. Claim 47 recites the limitation "the flutes of the corrugated core" in line 5 of the claim. There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 102***

28. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

29. Claims 25, 28-31 and 34-37 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,132,156 (Trassare, Jr. et al.).

Trassare discloses folded honeycomb comprising a large number of corrugated core strips which lie beside one another and in one plane and each consist of a corrugated or trapezoidal core with at least one cover layer (see column 2, lines 54-62; and Figures 2 and 3). The cover layer disclosed in the reference are also arranged parallel to one another and transversely with respect to the plane (see Figures 2 and 3). The corrugated core strips in the reference are also connected together to one another, wherein for each second corrugated core strip a cover layer of one corrugated strip is formed in one piece with the cover layer of one of the adjacent corrugated core strips and is connected to the latter via a fold of 180°, and the connections between adjacent corrugated core strips are arranged alternately on one side and the other side of the folded honeycomb (see Figure 2). Trassare further discloses that the cover layer of the corrugated or trapezoidal core of at least each second corrugated strip is wholly or partly connected over the entire area to the cover layer of the corrugated or trapezoidal core of at least one adjacent corrugated core strip (see Figure 4).

The reference also discloses a process for the production of a folded honeycomb comprising the steps of forming the connected corrugated core strips shown above; and rotating the connected corrugated core strips in relation to each other (see column 1, lines 32-40). It is also disclosed in the reference that touching surfaces are firmly connected to one another with adhesive (see column 3, lines 51-54). The honeycomb structure in the reference further includes at least one cover sheet laminated onto the folded honeycomb (see column 3, lines 51-54). The reference also discloses that the step of forming the connected corrugated core strips includes

cutting completely through the corrugated core to form individual corrugated core strips (see column 2, lines 59-62).

***Claim Rejections - 35 USC § 103***

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. Claims 26, 27, 32, 33 and 38-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,132,156 (Trassare, Jr. et al.).

Trassare discloses a folded honeycomb as shown above in paragraph number 28. The reference does not necessarily disclose the ratio between the width and the height of each corrugated core strip, or the ratio between the weights per unit area of the corrugated core material and the cover layer material; however, it is within the level of one having ordinary skill in the art to vary these ratios, depending on the desired strength and weight of the final honeycomb.

Trassare also does not specifically disclose a system for producing a folded honeycomb as claimed; however, it is disclosed that conventional methods are used to produce the honeycomb core (see column 2, lines 58-62). Apparatuses for forming honeycombs including cutting and rotation components are well known in the art. It would have been obvious to one having ordinary skill in the art that any apparatus used in methods for producing conventional honeycomb structures could be used for producing the Trassare cores.

***Conclusion***

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wendy Boss whose telephone number is 703-306-5922. The examiner can normally be reached on M-Th 8:30a-6:00p; 2nd F 8:30a-5:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 703-308-3822.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Wendy Boss  
January 27, 2003



DEBORAH JONES  
SUPERVISORY PATENT EXAMINER